UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/450,075	11/29/1999	DANIEL R. BAUM	11087-007001	7103

31688 7590 07/28/2004

TRAN & ASSOCIATES
6768 MEADOW VISTA CT.
SAN JOSE, CA 95135

EXAMINER	
RAHIMI, IRAJ A	

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 07/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/450,075	BAUM ET AL.	
	Examiner	Art Unit	
	(Iraj) Alan Rahimi	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 May 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-89* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-89* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 May 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. In papers filed on May 9, 2004, applicant amended claims 1, 35 and 43. Applicant also submitted new drawings in response to the draftsman objections. New drawings are acceptable.

Response to Arguments

2. Applicant's arguments filed on May 9, 2004 have been fully considered but they are not persuasive.

Applicant argues that Fredlund does not teach receiving an order specifying a plurality of recipients and, for each specified recipient, a set of one or more images associated with that recipient. Examiner disagrees and cites column 6, lines 29-41 were Fredlund discloses when order for a particular images are placed customer actuates the "done" button and can proceed to place another order which can be for another recipient. When customer has completed placing orders customer actuates the "place order" button, which advances to payment screen. "This facilitates sending the same image to different addresses (or different recipients) in screen 68 without re-editing the image." Since Fredlund teaches more that one recipient address, it suggests more than one recipient. Therefore Fredlund can meet the claim limitation for plurality of recipients. Fredlund also discloses in column 5, lines 32-47 that customer selects among the images the desired images to have printed.

Applicant also argues that newly amended claim includes the limitation for generating a contigous run of prints for each recipient specified by the order in not taught by Fredlund. Examiner disagrees and cites column 8, lines 56-63 which describes the end of the print ordering

method by stating that images are retrieved from the tape library and printed. Fredlund discloses in his invention that orders for each recipient is entered one at a time and once all images for all recipients are selected it collects the payment information and starts printing the desired images for each recipient. It is also obvious that prints for each recipient will be printed contiguously otherwise all prints will be mixed together and it would be very difficult to sort the prints for each recipient as well as being counter intuitive.

The response provided above applies equally to the arguments for claims 35 and 43.

Regarding claims 12-14, 29-31, 33, 59-76 and 89 applicant questions the motivation for combining Cok with Fredlund. Cok discloses dividing the order to sub-orders for respective image printers. The suborders can be also used for different recipients among other purposes. Fredlund in column 2, lines 1-11 discloses the inconvenience of re-ordering reprints and other image related services is barrier to ordering. Thus ways to improve ordering process reduces the burden on the customer and encourages repeated and easier use. Thus improving the ordering process is the focus of Fredlund. And by using suborders to process orders for each recipient one can conclude that order processing is made more convenient as desired by Fredlund. Therefore, it can be shown that Fredlund provides the motivation for using suborders since it can facilitate processing of orders more conveniently.

Applicant in his arguments refers to Johnson et al. reference which examiner had not made cited in previous paper.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-11, 32, 34-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Fredlund (US patent 5,666,215).

Regarding claim 1, Fredlund discloses a method of distributing image prints printed on a plurality of printers to a plurality of recipients, the method comprising:

Receiving an order specifying one or more recipients and, for each specified recipient, a set of one or more images associated with that recipient (column 5, lines 38-47; column 6, lines 21-41); and

for each recipient specified by the order, separating the images associated with the recipient into at least one printable unit of images (column 7, lines 18-30 and column 2, lines 42-44).

Fredlund discloses in column 2, lines 37- 40 that customer orders desired prints and services and designates a recipient. Since the claim calls for one or more recipient, the cited paragraph meets the claim limitation for one recipient. Fredlund also discloses in column 6, lines 29-41 when order for a particular images are placed customer actuates the "done" button and can proceed to place another order which can be for another recipient. When customer has completed placing orders customer actuates the "place order" button, which advances to payment screen. "This facilitates sending the same image to different addresses (or different recipients) in

screen 68 without re-editing the image." Since Fredlund teaches more that one recipient address, it suggests more than one recipient. Therefore Fredlund can meet the claim limitation for one or more recipients.

Regarding claim 2, Fredlund discloses the method of claim 1 further comprising , for each multiple unit, selecting a printer on which to print the printable unit. Fig. 1B shows print server 104 sending print jobs to printer 106, 108 and 110.

Regarding claim 3, Fredlund discloses the method of claim 2, further comprising, for each printable unit, printing at least one copy of each image in the printable unit on the selected printer. Fredlund discloses in column 5, lines 35-38 that customer selects the desired print quantity which can be one.

Regarding claim 4, Fredlund, discloses the method of claim 1 wherein each image has associated print parameters. Fredlund discloses in column 5, lines 35-38 that customer selects the desired print size. Print size is considered a print parameter.

Regarding claim 5, Fredlund discloses the method of claim 4 wherein the images in a printable unit of images have print parameters that allow the printable unit to be continuously printed (column 8, lines 56-64).

Regarding claim 6, Fredlund discloses the method of claim 1 wherein images in a first recipient's image set differ from images in a second recipient's image set (column 6, lines 30-41).

Regarding claim 7, Fredlund discloses the method of claim 4 wherein print parameters of a first recipient's image set differ from print parameters of a second recipient image set. Fredlund discloses in column 6, lines 30-41 that orders can be placed to different recipients. In column 5, lines 35-37 he also teaches that customer can select print size (considered as print parameter). Therefore, different recipients can have different print parameters for their image set.

Regarding claim 8, Fredlund discloses the method of claim 7 wherein print parameters include one or more of print size, number of copies, and/or print finish (column 5, lines 35-37).

Regarding claim 9, Fredlund discloses the method of claim 1 wherein print parameters differ among images within an image set. Fredlund discloses in column 5, lines 35-51 that customers identifies an image and selects print size, quantity and desired services and repeats the process for the next image.

Regarding claim 10, Fredlund discloses the method of claim 9 wherein print parameters include one or more of print size, number of copies, and/or print finish (column 5, lines 35-37).

Regarding claim 11, Fredlund discloses the method of claim I wherein each image set comprises an arbitrary grouping of images designated by a user. Fredlund discloses in column 5, lines 38-47 the selection by the user of an arbitrary set of one or more images.

Regarding claim 32, Fredlund discloses the method of claim 1 further comprising printing a destination identifier print that identifies the specified recipient for a corresponding sub-batch of image prints (column 8, lines 61-63).

Regarding claim 34, Fredlund discloses the method of claim 32 wherein printing the destination identifier print comprises printing one or more of the following items: a shipping address, a recipient's name, a print index, a bar code, a textual message and/or print re-ordering information (column 10, lines 59-65).

Regarding claims 35-37, arguments analogous to those presented for claims 1-3 respectively, are applicable.

Regarding claims 38 and 39, arguments analogous to those presented for claim 1, are applicable.

Regarding claim 40, Fredlund disclose the method of claim 39, wherein the physical manifestation of the set of digital content comprises photographic prints 107 of the one or more digital images (column 7, lines 20-22).

Regarding claims 41 and 45, arguments analogous to those presented for claim 5, are applicable.

Regarding claim 42, arguments analogous to those presented for claim 8, are applicable.

Regarding claim 43, Fredlund discloses a print distribution system comprising:

plurality of printers (106, 108, 110);

a front-end computer sub-system 26 for receiving an order specifying one or more recipients and, for each specified recipient, a set of one or more images associated with that recipient; and

a scheduler (print server 104), connected to the front-end computer sub-system and the plurality of printers, that for each recipient specified by the order (a) separates the images associated with the recipient into at least one printable unit of images, and (b) designates a printer on which each printable unit is to be printed (Fig. 1B and column 8, lines 45-63).

Regarding claim 44, arguments analogous to those presented for claim 4, are applicable.

Regarding claim 46-49 arguments analogous to those presented for claims 6-9 respectively, are applicable.

Regarding claim 50, arguments analogous to those presented for claim 8, are applicable.

Regarding claim 51, arguments analogous to those presented for claim 11, are applicable.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 12-24, 29-31, 33, 59-76 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fredlund et al. (US patent 5,166,215) in view of Cok (US patent 6,157,436).

Regarding claim 12, Fredlund does not disclose the method of claim 1 further comprising, for each recipient, separating the images associated with the recipient into one or more sub-orders. Cok discloses in column 2, lines 60 through column 3, dividing of an order for image prints into multiple sub-orders. Fredlund and Cok are combinable because they are from field of endeavor which is image printing system. Fredlund in column 2, lines 1-11 discloses the inconvenience of re-ordering reprints and other image related services is barrier to ordering. Thus ways to improve ordering process reduces the burden on the customer and encourages repeated and easier use. Thus improving the ordering process is the focus of Fredlund. And by using suborders to process orders for each recipient one can conclude that order processing is made more convenient as desired by Fredlund. Therefore, it can be shown that Fredlund provides the motivation for using suborders since it can facilitate processing of orders more conveniently.

Regarding claim 13, Cok does not specifically discloses the method of claim 12 wherein separating the images associated with the recipient into at least one printable unit of images includes, for each sub-order, separating the images associated with the sub-order into one or more sub-batches, each sub-batch representing a printable unit. As stated in claim 12, Cox does teach the principal of dividing an order to suborders and processing of the images accordingly. Therefore, further division or rearrangement of an order in smaller grouping is not considered to be novel and deemed obvious to do so. Therefore, it would have been obvious to a person skilled in the art, at the time of invention to subdivide an order to sub batches for further rearrange them in batches in order to distribute the image processing and printing to printers capable of fulfilling the order in a more efficient manner.

Regarding claim 14, Cok discloses the method of claim 13 wherein the images in a sub-batch have print parameters that allow the sub-batch to be continuously printed (column 11, lines 53-65).

Regarding claims 15, 16, and 18 arguments analogous to those presented for claim 13, are applicable.

Regarding claim 17, arguments analogous to those presented for claim 5, are applicable.

Regarding claim 19, Cok discloses the method of claim 16 further comprising scheduling the batches to be printed in a predetermined ordering. In column 12, lines 64-67 and continuing

in column 13, lines 1-6, the predetermined order of printing is considered to be printing of suborder header followed by the printing of images.

Regarding claim 20, Fredlund discloses the method of claim 19 wherein each order includes image data and control data. Fig. 3, shows image data area 50 and control data area 76.

Regarding claim 21, Fredlund discloses the method of claim 20 wherein the control data includes at least one of print parameters, user contact information, recipient information, payment information, and message information. Fig. 4, shows recipient information and message information.

Regarding claim 22, Fredlund discloses the method of claim 21 wherein the image data includes pixel data for the images in the order(column 4, lines 10-18).

Regarding claim 23, Fredlund discloses the method of claim 22 wherein the control data is used to control the printing of the images. Fig. 3, shows control data such as picture quantity , zoom and cropping.

Regarding claim 24, Fredlund discloses the method of claim 20 further comprising, before printing each image:

correcting tile image data for that image using information including the control data; and calibrating the image data using information including the control data and at least one

characteristic of the printer on which the image is to be printed (column 7, lines 37-44).

Regarding claim 29, Cok discloses the method of claim 1 further comprising verifying that an image print was printed with the correct image. Cok discloses in column 12, lines 7-28 that operator can view the reduced resolution image to ensure correct image being printed.

Regarding claim 30, Cok discloses the method of claim 1 further comprising checking the quality of the image print (column 12, lines 20-23).

Regarding claim 31, arguments analogous to those presented for claim 13, are applicable.

Regarding claim 33, Cok discloses the method of claim 32 wherein the destination identifier print delimits the corresponding sub-batch (column 10, lines 59-65).

Regarding claims 52-55, arguments analogous to those presented for claims 13, 15, 16 and 19 respectively, are applicable.

Regarding claims 59-62, arguments analogous to those presented for claims 26, 20, 21 and 22 respectively, are applicable.

Regarding claim 63, Fredlund discloses the system of claim 58 further comprising an image processor associated with at least one of the line controllers for processing the image data and at

least a portion of the control data prior to printing the image (column 6, lines 64-67 and column 7, lines 1-44).

Regarding claim 64, arguments analogous to those presented for claim 24, are applicable.

Regarding claim 65, arguments analogous to those presented for claim 32, are applicable.

Regarding claim 66, Cok discloses the system of claim 65 wherein the destination identifier image for each sub batch is generated from the sub-batch's control data and image data (column 9, lines 26-43).

Regarding claims 67, 75 and 76 arguments analogous to those presented for claim 27, 29 and 30 respectively, are applicable.

Regarding claim 68, Fredlund discloses the system of claim 43 further comprising, a back printer for back printing at least one image print (column 6, line 67 and column 8, lines 6-15).

Regarding claim 69, Fredlund discloses the system of claim 68 wherein the back printer back prints non-image information on each image print (column 6, line 67 and column 8, lines 6-15). Information on the labels is considered non-image information.

Regarding claim 70, Fredlund discloses the system of claim 69 wherein the non-image information includes at least one of an image number associated with the image, a printable unit

number associated with the printable unit from which image print was printed, reorder information, a bar code, and a message (column 6, line 67 and column 8, lines 6-15). Cover letter is considered a message.

Regarding claim 71, Fredlund discloses the system of claim 70 wherein the message is an advertisement. Fredlund discloses in column 6, lines 64 and continuing in column 7 that order information by the customer can be text on the back of image and text to personalize images such as greeting cards and birthday announcements. Such announcements can easily be considered form of advertising. Also In column 4, lines 60-76 Fredlund discloses that program may contain advertising specials.

Regarding claim 72, Cok discloses the system of claim 71 wherein the bar code encodes at least one of an audio message, the image number associated with the image, and the printable unit number associated with the printable unit from which the image print was printed. Cok discloses in column 10, lines 60-65 using barcode to include suborder information which includes image number. See Fig. 2. Additionally, Fredlund in column 7 lines 7-10 discloses using sound file representing sample audio to be sent to the processing lab.

Regarding claim 73, Cok discloses the system of claim 59 further comprising a digital camera for capturing data about at least one of the image prints (column 5, lines 46-49).

Regarding claim 74, Cok does not disclose the system of claim 73 wherein the camera is a low-resolution camera. However it is well known in the art that digital cameras can be of low resolution or high resolution depending on the photosensitive cell used to capture incoming light. Therefore, it would have been obvious to a person skilled in the art, at the time of invention to use a low-resolution camera to keep the cost down.

Regarding 89, Fredlund discloses the system of claim 52 further comprising a storage device (computer 26) in which one or more sub-batches can be stored for later combination with other sub-batches. Computers are well known to have storage devices such as RAM, ROM and hard disks.

7. Claims 25-28, 58 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fredlund et al. (US patent 5,166,215) in view of Cok (US patent 6,157,436) and further in view of Shaked et al. (US patent 6,600,573).

Regarding claim 25, Fredlund does not disclose the method of claim 20 further comprising, for each batch, storing the image data for the batch in a cache that is local to the selected printer for that batch. Shaked et al. discloses in column 3, lines 28-30 that green/magenta dithering is performed in memory. Fredlund and Shaked are analogous art because they are from the same field of endeavor that is printing art. Therefore, it would have been obvious to a person skilled in the art, at the time of invention to combine Shaked with Fredlund to perform dithering in memory.

Regarding claim 26, Cok discloses the method of claim 25 further comprising, for each batch, placing the control data for the batch in a queue associated with the selected printer for that batch (column 8, lines 21-47).

Regarding claim 27, Cok discloses the method of claim 26 further comprising, for each batch that is placed in a queue, sending the image data associated with the images included in that batch to an image processor associated with the selected printer for that batch (column 7, lines 26-30).

Regarding claim 28, Cok discloses the method of claim 27 wherein, for each batch that is placed in a queue, sending the image data for that batch to the image processor associated with that queue before the batch reaches the front of the queue (column 7, lines 26-30).

Regarding claim 58, arguments analogous to those presented for claim 26, are applicable.

Regarding claim 62, arguments analogous to those presented for claim 25, are applicable.

8. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fredlund et al. (US patent 5,166,215) in view of Cok (US patent 6,157,436) and further in view of Chan et al. (US patent 5,557,761).

Regarding claim 56, Fredlund in view of Cok do not teach the system of claim 55 wherein the scheduler uses a global scheduling algorithm. Chan et al. teaches use of global scheduling algorithm in column 1, lines 8-38. Fredlund, Cok and Chan are analogous art because they are from the same field of endeavor that is processing set of instructions. Therefore, it would have been obvious to a person skilled in the art, at the time of invention to use the global scheduling algorithm to schedule processing of orders which are not much more than set of instructions to be processed.

9. Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fredlund et al. (US patent 5,166,215) in view of Cok (US patent 6,157,436) and further in view of Gringeri et al. (US patent 6,233,226).

Regarding claim 57, Fredlund in view of Cok do not teach the system of claim 55 wherein the scheduler uses a just-in-time scheduling algorithm. Gringeri discloses in column 5, lines 38-45 use of just in time scheduling. Fredlund, Cok and Gringeri are analogous art because they are from the same field of endeavor that is analyzing and distributing images. Therefore, it would have been obvious to a person skilled in the art, at the time of invention to use just in time scheduling to process orders as they arrive for quicker delivery.

10. Claim 77 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fredlund et al. (US patent 5,166,215) in view of Zorn (US patent 6,129,346).

Regarding claim 77, Fredlund does not disclose the system of claim 43 further comprising an inverter that inverts each image print prior to backprinting. Zorn discloses in column 7, lines 29-31 that web can be inverted before printing. Fredlund and Zorn are analogous art because they are from the same field of endeavor that is printing documents. Therefore, it would have been obvious to a person skilled in the art, at the time of invention to invert the web for printing to reduce the cost of printing.

11. Claims 78-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fredlund et al. (US patent 5,166,215) in view of Juan (US patent 6,554,415).

Regarding claim 78, Fredlund does not discloses the system of claim 77 further comprising a curl reduction equipment that reduces curling of the image print prior to backprinting. Juan discloses in column 1 lines 16-22 vacuum plate to hold down the sheet. Fredlund and Juan are analogous art because they are from the same field of endeavor that is printing art and specific to curl reduction methods. Therefore, it would have been obvious to a person skilled in the art, at the time of invention to use the vacuum table of Juan to maintain paper flatness.

Regarding claim 79, Juan discloses the system of claim 78 wherein the curl-reduction equipment uses suction to reduce curling of the image print (column 1 lines 16-22).

Regarding claim 80, Juan discloses the system of claim 79 wherein the curling-reduction equipment device includes a vacuum table (Fig 4, items 380 and 400).

12. Claims 81-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fredlund et al. (US patent 5,166,215) in view of Juan (US patent 6,554,415) and further in view of Church et al. (US patent 4,049,256).

Regarding claim 81, Fredlund in view of Juan do not disclose the system of claim 77 further comprising an alignment device that aligns each image print prior to backprinting. Church discloses in column in column 4, lines 31-59 and Fig.1 alignment edge 43c. Fredlund, Juan and Church are analogous art because they are from the same field of endeavor that is printing documents/images. Therefore, it would have been obvious to a person skilled in the art, at the time of invention to use the alignment edge of Church to ensure that paper is inserted correctly into the envelope.

Regarding claim 82 Church discloses the system of claim 81 wherein the alignment device includes:

an alignment wall against which each image print is to be aligned prior to backprinting; and

a skew conveyor that receives each image print after the image print has been printed and moves the image print towards the alignment wall as the skew conveyor conveys the image print to the backprinter (column 4, lines 31-59 and Fig. 1).

Regarding claim 83, Church discloses the system of claim 82 further comprising an alignment sensor positioned laterally inward from the alignment wall that detects whether a portion of the image print is positioned immediately beneath the alignment sensor (column 4, lines 31-59 and Fig. 1).

Regarding claim 84, Church discloses the system of claim 83 wherein the alignment sensor is a photosensor that optically senses the presence of the image print (column 4, lines 31-59 and Fig. 1).

13. Claims 85-88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fredlund et al. (US patent 5,166,215) in view of Robertson (US patent 6,505,534).

Regarding claim 85, Fredlund does not discloses the system of claim 43 further comprising a conveyor on which image prints are stacked after printing. Robertson discloses in column 3, lines 26-31 plurality of bins and shelves are provided for receiving documents. Fredlund and Robertson are analogous art because they are from the same field of endeavor that is processing and printing documents/images. Therefore, it would have been obvious to a person skilled in the art, at the time of invention to use the bins and shelves of Robertson to stack the printed documents or pictures to keep each job separated from the other.

Regarding claim 86, Robertson discloses the system of claim 85 further comprising a controller, connected to the conveyor, that advances the conveyor so that a new stack can be

stacked after all the image prints in a printable unit have been stacked on the conveyor (column 4, lines 43-56).

Regarding claim 87, Robertson discloses the system of claim 86 further comprising a plurality of bins, positioned on the conveyor, so that the image prints for a printable unit are stacked in a bin (column 3, lines 26-31).

Regarding claim 88, Robertson discloses the system of claim 87 wherein the bin comprises:

a base for supporting the bin when the bin is placed on a surface of the conveyor;

a first bottom wall connected to the base so that the first wall has a pitch incline with respect to the surface of the conveyor; and

a second bottom wall connected to a first end of the first wall at one end, the second wall and first wall forming an angle so that image prints received in the bin tend to stack on the first bottom wall with an edge of each image print registering with the second bottom wall (Fig. 1, item 20).

Conclusion

14. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to (Iraj) Alan Rahimi whose telephone number is 703-306-3473. The examiner can normally be reached on Mon.-Fri. 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L Coles can be reached on 703-305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AR

Alan Rahimi
July 16, 2004

EDWARD COLES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600